

WHAT IS CLAIMED IS:

1. An inventory management system comprising:
at least one piece of equipment having a plurality of components, each of
5 said components having a predictable lifetime;
an inventory of replacement parts for said components;
a computational element operatively coupled to said equipment; and
a mechanism for managing said inventory by tracking said predictable
lifetime of said components through usage of said piece of equipment.
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2. The inventory management system of claim 1, wherein said
computational element further comprises a user interface, said mechanism is
coupled to said computational element and said mechanism further comprises an
input device that allows entry and deletion of parts within said inventory.
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3. The inventory management system of claim 1, wherein at least one
of said predictable lifetimes to said components are compared against a threshold
that is based on said equipment usage and monitored by said mechanism.
- 20 4. The inventory management system of claim 1, wherein said
mechanism further comprises:
at least one input from said piece of equipment to said computational
element forming said operational coupling, said input providing usage updates on
said piece of serviceable equipment;
25 at least one threshold for each of said components that is compared against
usage of said piece of equipment; and
a notification that is triggered when said threshold is reached.
5. The inventory management system of claim 4, wherein said
30 threshold is an accumulated total amount of usage being equal to one of said
predictable lifetimes.

6. The inventory management system of claim 1, wherein said mechanism further comprises an inventory notification that is activated when a total number of replacement parts for a specific component within said inventory reaches a predetermined number.

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7. The inventory management system of claim 1, wherein said mechanism further comprises a set of parameters related to said predictable lifetime of said components, said set of parameters being used to determine quantities of reorder parts for said inventory.

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8. The inventory management system of claim 1, wherein said mechanism for tracking further comprises a set of parameters related to said predictable lifetime of said components, said set of parameters being used to determine a frequency at which reorder of parts for said inventory is made.

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9. The inventory management system of claim 8, wherein said set of parameters includes a rate of use of said replaceable components.

10. The inventory management system of claim 1, wherein said piece of equipment is a printing system and said mechanism is coupled to update said inventory with data regarding a remaining page life of said replaceable components, wherein said remaining page life is a value substantially equal to said predictable lifetime minus a printer use value which represents the use of said printing system since said replaceable components have been put into service.

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11. The inventory management system of claim 10, wherein said predictable lifetime is a dynamic variable that can change proportionately with use of said printing system.

12. The inventory management system of claim 10, wherein at least one of said predictable lifetimes is computed when one of said replaceable components is taken out of stock and replaced.

5 13. The inventory management system of claim 10, wherein said mechanism uses a daily printer page count to more accurately predict said inventory needs by tracking said remaining life of said replaceable components.

10 14. The inventory management system of claim 13, wherein said mechanism manages said inventory for a plurality of printers, and tracks said daily page count for each of said plurality of printers.

15 15. The inventory management system of claim 10 wherein said mechanism creates said order form for a predetermined number of shipments within a given time period based on a comparison of said remaining life with an expected use parameter.

20 16. The inventory management system of claim 10, wherein said computational element further comprises as the operative coupling, an integration system that takes said predictable lifetime of said replaceable components, said printer use value and compares these values with stock of said replaceable components within said inventory to provide an analysis for demand of said replaceable components.

25 17. A method for inventory management comprising the steps of:
providing at least one piece of serviceable equipment item that has a plurality of replaceable components, and also providing an inventory of said replaceable components;
calculating a predetermined life span to each of said replaceable
30 components within said serviceable piece of equipment;

creating a system for tracking said predicted life span of said replaceable components; and
managing said inventory using said system for tracking.

5 18. The method of inventory management of claim 17, wherein the step of creating further comprises said system for tracking having a set of parameters based on said predicted life span of said replaceable components that is used to determine quantities of reorder parts for said inventory.

10 19. The method of inventory management of claim 17, wherein the step of creating further comprises said system for tracking having a set of parameters based on said predicted life span of said replaceable components used to determine a frequency at which parts for said inventory are reordered.

15 20. The method of inventory management of claim 17, wherein the step of creating further comprises said system for tracking having a set of parameters based on said predicted life span of said replaceable components that include a rate of use of said replaceable components and wherein the step of managing further comprises determining a replenishment period for said replaceable
20 components.

 21. The method of inventory management of claim 18, wherein the step of providing further comprises said serviceable piece of equipment being a printing system and wherein the creating step further comprises said tracking
25 system being coupled to said inventory to receive data regarding said rate of use for said replaceable components.

22. The method of inventory management of claim 19, wherein the step providing further comprises a printing system as said serviceable equipment item and the step of managing further comprises determining a page life for said replaceable components from said rate of use, is a dynamic variable that can change over time for any of said replaceable components.

23. The method of inventory management of claim 20, wherein the step of managing further comprises said page life is for said replaceable components is computed each time one of said replaceable components is taken out of stock and replaced.

24. The method of inventory management of claim 22, wherein the step of creating further comprises said tracking system tracking a daily page count for each of a plurality of printers.

25. The method of inventory management system of claim 22, wherein the step of managing further comprises integrating said predicted lifespan of said replaceable components, said rate of use and comparing these values with stock of said replaceable components within said inventory to provide an analysis for demand of said replaceable components.